REMARKS

Claims 1-22 stand finally rejected in the above-identified patent application, and remain pending after entry of this amendment.

Claim 18 has been amended to correct a typographical error as the term "central portion" does not appear previously in that claim, whereas the term "back panel" is used. Because this rectifies a form error, the amendment is proper after a final office action.

Rejection Under 35 U.S.C. §102

Claims 1, 5 and 7-11 were rejected under 35 U.S.C. §102 as being anticipated by the Chew, *et al.* patent.

Item 6 of the Office Action states that Chew, *et al.* teaches a cushion attached to a shell and having "a body that stretches and contracts to conform to alteration of the curvature of the shell." However, nowhere does that patent mention a cushion which stretches and contracts, nor does the patent even come close to teaching a cushion as recited in these claims.

Chew *et al.* is primarily directed to describing an adjustable shell that has a base member 15 to which two wings 19 are movably attached to form the skeleton of a seat back. Although covering the shell with a foam cushion is mentioned, the description of that cushion is so sketchy, one can not contend that it suggests, much less anticipates, the present invention. The drawings do not show a cushion and the sum total of information in the specification regarding a cushion is contained in the following four sentences sprinkled throughout the patent:

> "The base member consists of one or more rigid shells covered with a compressible foam. (column 1, lines 59-61)
>
> "The back member is covered with a compressible foam and an outer covering." (column 2, lines 19-20 and again at column 3, lines 46-48)
>
> A foam covering system is provided which accommodates adjustment of the lateral members relative to the back. (column 2, lines 23-23 and again at column 2, lines 23-23)
>
> The base member 15 consists of one or more rigid shells 20 ultimately covered with a compressible foam. (column 2, lines 63-64)

However, these vague references to foam fail to provide sufficient detail to teach the specific body which stretches and contracts to conform to alteration of the curvature of the shell as in claim 1. Nowhere does this patent mention that more than one of the seat back components are covered by the same piece of foam. Chew *et al.* likely is referring to nothing more than a well known wheelchair cushion similar to that in the Jay, *et al.* U.S. patent 5,593,211, in which each of the different adjustable sections of the seat shell has a separate body of foam attached thereto that allow those sections to move with respect to one another. The Jay, *et al.* patent also mentions (column 13, lines 10-30) that the individual foam bodies are encased in a single cover as shown in Figure 12.

In fact the Chew *et al.* claims recite using separate foam bodies that accommodate adjustment of the seat back components. For example claim 9 states:

> "9. A back assembly as set forth in claim 8, wherein said back member is covered by foam and said lateral supports include foam scarfed so as to permit adjustability of the supports relative to the back." (emphasis added)

The term "scarfed" refers to a joint between two separate pieces in which the abutting edges are beveled or notched to overlap each other. The overlapping permits the two

pieces of foam to slide or pivot with respect to each other as the lateral members 19 of the Chew *et al.* seat back are adjusted with respect to the base member 15. Therefore, what little teaching the patent provides about a seat cushion describes one formed by separate foam pieces that move with respect to each other, but do not stretch and contract, to conform to alteration of the curvature of the shell.

As a consequence, the vague references to a foam cushion and cover in a Chew, *et al.* do not provide a sufficient teaching to anticipate the seat back recited in claim 1 in which the cushion body stretches and contracts to conform to alteration of the curvature of the seat shell. Therefore, that patent does not render claims 1, 5 and 7-11 unpatentable under 35 U.S.C. §102.

Furthermore, the dependent claims provide additional unique features which are not taught by Chew, *et al.* Claims 7 and 8 further define the structure of the seat back panel to which the two wings are adjustably fastened. Specifically as shown in Figure 1 of the present application, the back panel has a central portion 32 from one side of which a first lateral portion 35 extends at a forward angle, and a second lateral portion 36 extends at a forward angle from another side. As evident from in Figures 2 and 3 of Chew, *et al.*, its back panel 50 is a smooth sheet that gradually curves and does not have a central portion with two separately defined angled lateral portions. In the version of the seat back with the optional spinal channel 56 (see Figure 5 and 6, column 3, lines 40-45), the lateral portions of the back on both side of that channel appear to be coplanar and do not project forward. Certainly those drawings do not depict the back panel in claims 7 and 8.

The fastener arrangement recited in claim 11 also is not disclosed in the Chew, *et al.* patent. Specifically this claim recites a bracket attached to the shell and a hook portion attached to the frame of the wheelchair (Figure 3) wherein the hook portion has an aperture and the bracket has a slot through both of which a threaded fastener passes. The final Office Action contends (top of page 3) that Chew, *et al.* has the claimed hook portion 35 and bracket 26. However, those components are not connected by a threaded fastener. Instead an unthreaded pin 33, which projects from and is fixed to the bracket 26, passes through an aperture 39 (Figure 10) in the hook portion 35 that pivots about that pin (column 3, lines 19-25.) In addition to the pin being unthreaded, it is not received in a slot of the bracket, as required by claim 11. The Chew, *et al.* bracket having a slot through which other fasteners pass to secure the bracket to the seat shell does not suggest the fastening mechanism for the hook portion recited in claim 11.

The description of the seat cushion in Chew, *et al.* is so cursory that it is inadequate to provide an anticipatory teaching of the present invention. Therefore, the Chew, *et al.* patent does not render claims 1, 5 and 7-11 unpatentable under 35 U.S.C. §102.

Rejection Under 35 U.S.C. §103

Claims 2, 3, 4, 6 and 12-22 have been rejected 35 U.S.C. §103 as unpatentable over Chew, *et al.* in view of Stulik.

With respect to claims 2-4, 6 and 13-22, although Chew, *et al.* teaches a wheelchair seat back that has a shell with adjustable lateral wings, it does not suggest a cushion with a body that stretches and contracts or otherwise conforms to alteration of the curvature of the

shell as stated above with respect to claim 1. Therefore, this ground of rejection must rely primarily on the Stulik patent for teachings about the seat cushion.

It is respectfully submitted that the characteristics of the Stulik seat cushion for a motor vehicle would not lead one skilled in the art of wheelchairs to combine that cushion with the adjustable seat back disclosed in the Chew, *et al.* patent. That latter patent describes a seat back in which the lateral, i.e. left and right, sides are adjustable by moving the curved wings 19 in and out to alter the arc of the seat back to match the user's girth. Therefore, any cushion suitable for that type of seat back must accommodate horizontal alteration of the seat back curvature as stated in the patent (see column 3, lines 26-58).

However, the Stulik flat seat cushion adjusts linearly to accommodate occupants of different heights, not widths (column 1, lines 11-23). That document notes that taller persons prefer a higher seat back that better accommodates their taller torso and also a seat bottom that is adjustable front to back to conform to their longer legs. In contrast, a shorter person requires shorter seat elements. It is linear variation of the front to back dimension of the seat bottom and of the height of the seat back to which Stulik's adjustable seat cushion is directed. Note that one of those cushions can be used as the seat bottom, with another separate seat cushion being used as a seat back. Nowhere is there a suggestion of using the linearly adjustable Stulik cushion with a seat as described in Chew, *et al.* in which the lateral or side-to-side curvature is variable, nor does Stulik suggest a seat cushion that could accommodate such lateral adjustment.

In order to support a conclusion that a claimed combination is obvious, the references must either impliedly or expressly suggest the selection of the various elements in that combination, *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d 1248, 1250

(Fed. Cir. 1989). What a skilled artisan would find obvious to try is not the test for obviousness under 35 U.S.C. §103, *In re Geiger*, 815 F.2d 686, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987). The Office Action has failed to demonstrate how the combined cited art provides that requisite suggestion.

The obvious combination of the articles in the two patents would have the Stulik cushion oriented with dimension D (Figure 1) extending vertically and the grooves 14 between the different cushion sections 12a, 12b and 12c running horizontally on the Chew, *et al.* seat back. However, that would not provide a seat cushion that stretches and contracts to conform to alteration of the horizontal curvature provided by the Chew, *et al.* lateral wings and thus does not suggest the subject matter in claims 2-4, 13, 14 and 18-22.

Significant unobvious modifications of Stulik's cushion would be required for it to work with that curving, laterally adjustable beat back in Chew, *et al.* The first unsuggested modification would be to rotate the cushion orthogonally from the orientation taught in Stulik so that dimension D extends horizontally and the two grooves 14 run vertically. After rotation, the cushion foam would have to be modified to curve and not merely lay flat as disclosed in the patent. Even then, the cushion in that new orientation would not conform the curvature of the Chew, *et al.* seat back because the seat cushion now is not symmetrical left to right. In the new orientation, the two grooves 14 in the cushion at which linear adjustment occurs would be located to one side of the center of the seat back so that the two smaller sections 12b and 12c are also on that side. Therefore, the very large cushion section 12a now extends horizontally across the other half of the seat back. But that larger section does not have a groove 14 and thus would not bend to conform to the curved wing 19 on that side. The resiliency of the foam tends to return that cushion section

12a to its flat form, thereby preventing conformance to a curve. In other words, the Stulik seat cushion would not fit nor accommodate the lateral adjustments of the Chew, *et al.* shell without significant changes. Nothing suggests all those modifications necessary to make the Stulik cushion fit and work with Chew, *et al.* seat back.

As a result, it is unlikely one of ordinary skill in the art would apply the Stulik seat cushion to the Chew, *et al.* seat back and even doing so would not enable that cushion to conform to alteration of the curvature of the seat back shell.

Claims 2, 3 and 12-22 also state that the shell has a back panel with a central portion from which two lateral panels project forward from each side. A separate wing is attached to each of those lateral panels. As discussed above with respect to claim 7, Figures 2 and 3 of Chew, *et al.* show a gradually curved back panel 50 without separately defined central and lateral portions. In the version of the seat back with the optional spinal channel 56 (see Figure 5 and 6, column 3, lines 40-45) the portions of the back on both side of the channel appear to be coplanar and do not project forward as in the pending claims.

Regardless of the seat back version from Chew, *et al.*, neither that patent nor Stulik suggests a seat cushion with a single body of resilient material that has the sections which conform to or extend adjacent to the back panel and the attached lateral wings. Therefore, the structure recited in this group of claims is not suggested by the combination of the two patents cited in the rejection.

In addition to these fundamental differences between the presently claimed subject matter and that disclosed in the cited references, other pending dependent claims specify more detailed structure that is not disclosed nor suggested by the prior art. Claims 6, 14

and 19 state that the cushion body is encased in a cover of stretchable material. On page 6, the final Office Action makes the unsupported contention that Stulik's cover is inherently of stretchable material. However the patent states that its cover is a layer of cloth or vinyl upholstery material, but such materials are not inherently stretchable. Not only does that reference not mention a stretchable cover, the linear cushion adjustment is accomplished by the cover folding into voids 16 in the foam thereby forming grooves 14. The folding of the cover does not require stretchable material. As a result, nothing about the Stulik seat cushion cover indicates stretchability.

Dependent claim 13 states that the body of the seat cushion in independent claim 12 stretches and contracts to conform to alteration of the length of curvature of the shell which length runs horizontally from side-to-side as the term is defined in the context of claim 12. For the reasons expressed previously with respect to the patentability of claim 1, claim 13 also is patentable.

Independent claim 18 recites a seat shell that has a back panel with two vertical sides from each of which a separate wing adjustably projects forward. A cushion has a single piece body with a central section adjacent the back panel and two pleated lateral sections adjacent the forward projecting wings.

Although Chew, *et al.* has a similar shell, it at best discloses a cushion with sections formed by separate pieces of foam. Nothing in the Stulik patent suggests a cushion body with different pleated lateral sections. Instead Stulik teaches a cushion that has different sections 12a, 12b and 12c stacked vertically up the seat back and not laterally with respect to one another. The stated function of that cushion is to lengthen or shorten in the vertical

direction to accommodate occupants of a different heights. Therefore, Chew, *et al.* teaches a seat back having a horizontally adjustable curvature, whereas the Stulik patent teaches a cushion that is vertically adjustable in a linear manner. As a consequence, references together do not suggest using their articles in concert, much less modifying Stulik teaching by rotating its cushion and changing the respective sizes of its sections to accommodate the adjustable wings of Chew, *et al.*

In summary, it is unlikely that a skilled artisan would combine the dramatically different seat cushion in Stulik with the adjustable seat shell in Chew, *et al.* and even that a combination still would not suggest several detailed features of the present invention. Therefore, the office action has failed to establish a prima facie case that claims 2, 3, 4, 6 and 12-22 are unpatentable under 35 U.S.C. §103.

Conclusion

In view of these distinctions between the subject matter of the present claims and teachings of the cited patents, reconsideration and allowance of the present application are requested.

Respectfully submitted,
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